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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,381	01/31/2002	Dennis J. O'Rear	005950-746	7484

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E. Joseph Gess
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Alexandria, VA 22313-1404

EXAMINER

NGUYEN, TAM M

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 08/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/059,381

Applicant(s)

O'REAR ET AL.

Examiner

Tam M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 6-9, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 6-9, 18, and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/14/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2-4, 6-9, 18 and 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15, 19-35 and 39-42 of copending Application No. 10/059,383. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims claim a process for producing gasoline from a Fischer-Tropsch product by hydrotreating to remove oxygenates from a naphtha feedstock and reforming the hydrotreated feedstock. The present claimed set does not specifically disclose that a Fischer-Tropsch naphtha is mixed with a Fischer-Tropsch distillate. However, the present claimed set claims that a Fischer-Tropsch naphtha is mixed with a petroleum derived naphtha. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of the present claimed set by using a Fischer-Tropsch distillate instead of a petroleum derived naphtha because of the chemical similarities between a Fischer-Tropsch distillate and a petroleum derived naphtha.

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Therefore, it would be expected the results would be similar when using a Fischer-Tropsch distillate in the present claimed process.

Claims 2-4, 6-9, 18 and 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11, 13-21 and 24-40 of copending Application No. 10/059,382. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims claim a process for producing gasoline from a Fischer-Tropsch product by hydrotreating and reforming. The claimed process of the copending application does not specifically disclose that oxygenates are removed in the hydrotreating step. However, the treating step of the claimed process of the copending application is similar to the present claimed process. Therefore, it would be expected that oxygenates are moved in the hydrotreating step of the claimed process of copending applicant as claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4, 6-9, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Donald.M Little "Catalyst Reforming, PennWell Books" 1985 in view of Derr et al. (4,080,397).

Little discloses a reforming process of a naphtha (e.g., Fischer-Tropsch naphtha) to produce gasoline having an octane number greater than 100 RON by contacting the naphtha with a catalyst. Little discloses that the hydrogen produced from the reforming step can be used in a hydrotreating process. Little also discloses that the gasoline product comprises at least 10 wt. % of aromatics. (See Preface, pages 1-5, 24-27, 40-63, 122)

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Little does not disclose that the naphtha feedstock is hydrotreated to remove oxygenates from the naphtha.

Derr discloses a process for producing a distillate (e.g., gasoline) by combining a Fischer-Tropsch naphtha with a petroleum fraction having a high level of sulfur to produce a combined feed having a sulfur content of greater than 10 ppm. The combined feed is then hydrotreated to remove oxygenates from it wherein the hydrotreating catalyst comprises a sulfided non-noble metal such as Ni and Mo. (See abstract; col. 2, line 5 through col. 5, line 15)

Derr does not disclose a reforming process of the naphtha as claimed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Little by using a naphtha which has been treated to remove oxygenates as taught by Derr because any naphtha boiling within the gasoline range can be used in the process of Little to produce a high octane gasoline.

Both Little and Derr do not specifically disclose that a FT naphtha is mixed with a petroleum derived naphtha. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Little/Derr by using a petroleum distillate because any petroleum fraction which contains sulfur and hydrocarbons that is similar to the FT product can be used in the process of Derr. Therefore, it would be expected that the results would be the same or similar when using either the Derr petroleum fraction or the claimed petroleum distillate in the process of Derr/Little.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over references as applied to claim 18 above, and further in view of Moore (6,583,186).

Both Little and Derr do not disclose that the hydrotreating catalyst comprises noble metal such as Pt.

Moore discloses a hydrotreating catalyst comprising Pt or Ni. (See col. 10, line 23 through col. 11, line 32)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the combined process of Little/Derr by using a catalyst comprising Pt because Pt has equivalent function as Ni.

Response to Arguments

The argument that there is no motivation or suggestion to combine the reforming process of Little with the hydrotreating and then selective cracking process of Derr is not persuasive. Derr is relied upon to teach a hydrotreating (removing oxygenates) of a naphtha feed while Little is relied upon to teach a reforming process of a naphtha feed. It is known that oxygenates are contaminants in a reforming process. Therefore, one of skill in the art would upgrade the product of Derr in the reforming process of Little to produce a high quality fuel. It is also reminded that the process of Derr comprises a hydrotreating step as claimed. The claimed process does not exclude a cracking process. Furthermore, only a selective fraction of Derr is cracked, not the entire product of Derr is cracked.

The argument that there is no motivation or suggestion to combine the reforming process of Little with the hydrotreating and then selective cracking process of Derr, which already produces a gasoline is not persuasive because as discussed above, the process of Derr produces many fractions having different boiling ranges including naphtha and distillate. It is reminded

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that even gasoline (which boils within naphtha ranges) can be upgraded in the process of Little to improve octane numbers, even if the entire product effluents of Derr are cracked. One of skill in the art would employ only the hydrotreated naphtha (un-cracked) of Derr in the process of Little if the cracking step is undesired and because Little interests in reforming a naphtha fraction.

The argument that Little in view of Derr does not disclose or suggest a blended naphtha having a sulfur level of at least about 1 ppm, obtained by mixing a Fischer-Tropsch naphtha with a petroleum-derived naphtha is not persuasive. Little discloses that the combined feed comprises more than 1 ppm of sulfur and a source of sulfur compounds is added to the feed. It is expected that most, if not all, of hydrocarbon sulfur compounds are derived from petroleum. Since any hydrocarbon sulfur compound having a boiling point within the claimed feed would be effectively employed in the process of Little, it would be expected that the results would be the same or similar when using a source of sulfur compounds from a petroleum-derived naphtha or from other sources in the process of Little.

The argument that Moore does not disclose or suggest any element that would supplement the deficiencies of Little in view of Derr is not persuasive because Moore is relied upon to teach a hydrotreating catalyst comprising Pt or Ni. One having ordinary skill in the art would use a catalyst comprising Pt in the process of Little/Derr because Pt has equivalent function as Ni.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

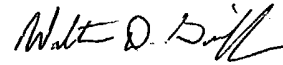
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (571) 272-1452. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tam M. Nguyen
Examiner
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TN


Walter D. Griffin
Primary Examiner